

School of Ecosystem and Forest Sciences



The Woody Meadows Pilot Plantings **Species selection**

Woody Meadow Pilot Plantings

In 2016 we installed two Woody Meadows as pilot plantings in a collaborative project with the City of Melbourne, the Trawalla Foundation, the Royal Botanical Gardens of Victoria and the University of Sheffield.

This research established two (180 m²) plots in the City of Melbourne, which have thrived over three years with minimal maintenance.

The woody meadow pilot plantings were designed as a three-layer community to replicate the structure of shrub-based natural ecosystems and provide visual interest.

Shrubs were chosen for each layer based on their height at maturity:

- 1) Base layer (shrubs <1 m)
- 2) Bump layer (shrubs 1-2 m)
- 3) Emergent layer (shrubs >2 m)

The base layer provides ground coverage and reduces weeds. The bump layer provides the most visual impact and fewer emergent species are used due to their size.

The woody meadow is maintained by coppicing every 1-3 years to promote flowering and dense canopies to

exclude weeds. Coppicing is hardpruning of the entire plant (10-20 cm above the ground).

Australian shrublands are highly diverse and occur on nutrient-poor soils, making them ideal templates for low-input meadow plantings. Many of these shrubs are also extremely tolerant of disturbance and can resprout after damage from fire, herbivory, flooding or drought. This ability to resprout makes Australian shrubs perfectly suited to coppicing.

We used literature from horticulture and ecology to come up with a list of potential species suitable for coppicing in Woody Meadows. This resulted in 1,200 species and a shortlist of 287 species which were reviewed by an expert panel (Paul Thompson, Rodger Elliot, Scott Watson, Digby Growns, John Arnott and Warren Worboys).

A final list of 21 species were chosen for the Woody Meadows based on their capacity to reshoot after coppicing and drought tolerance. Plants were contract grown by nurseries and we recommend 9-12 month lead time for ordering plants.

Species planted at the City of **Melbourne Pilot Plantings**

Base layer

Goodenia ovata 'Gold Cover' Dampiera alata Veronica arenaria Banksia spinulosa subsp. spinulosa Grevillea lanigera 'Mini Prostrate' Beaufortia sparsa Xanthosia rotundifolia Melaleuca thymifolia 'Pink Lace' Callistemon 'Little John' Veronica perfoliata Astartea fascicularis Philotheca myoporoides subsp. myoporoides

Bump layer

Calothamnus quadrifidus Acacia acinacea Melaleuca nesophila 'Little Nessie' Grevillea 'Coconut Ice' Eucalyptus latens 'Moon Lagoon' Leptospermum polygalifolium 'Cardwell'

Emergent layer

Eucalyptus preissiana Alyogyne huegelii Eucalyptus caesia

(cont.)



Species for other plantings should be chosen on the basis of their known horticultural tolerances and ability to resprout.

We recommend planting mixtures of 10-15 species for Woody Meadows.

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This pilot woody meadow of 21 species at Birrarung Marr thrived over three years with manual coppicing and low maintenance, flowered continuously and achieved canopy closure within a year of initial coppicing. Photo C.Farrell



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